

Application Serial No.: 10/577,140
Office Action mailed January 4, 2011
Response to Office Action dated January 28, 2011

AMENDMENT TO THE DRAWINGS

Applicant submits herewith Replacement Sheets 1/8 through 8/8, which include formal drawings of Figures 1 through 14. No new matter has been added.

REMARKS

This Amendment and Response is made in reply to the Office Action mailed January 4, 2011, in which the Examiner:

objected to the drawings;

objected to the Abstract;

objected to claims 32 and 33;

rejected claims 20-25 and 28-34 under 35 U.S.C. § 112, second paragraph, as indefinite;

rejected claim 34 under 35 U.S.C. § 101;

rejected claims 20-25 and 28-34 under 35 U.S.C. § 102(a) as anticipated by German Utility Model No. DE 202 08 106 U1 by Danfoss Silicon Power GmbH (“the German Utility Model”); and

rejected claims 20-25 and 28-34 under 35 U.S.C. § 102(d) as anticipated by the German Utility Model.

This Amendment and Response incorporates the amendments and arguments which were originally filed in Applicant’s response to the Office Action mailed July 21, 2010, which was filed on October 19, 2010. In the outstanding Office Action mailed January 4, 2011, the Examiner notes that Applicant’s *bona fide* response to the Office Action mailed July 21, 2010, failed to address the objections to claims 32 and 33 that were set forth therein. Accordingly, Applicant has addressed each of the outstanding objections and rejections that were included in that Office Action in this Amendment and Response. Specifically, Applicant has addressed the objections to claims 32 and 33 on pages 9 and 10 of this paper. The page references set forth herein refer to the pages of the Office Action mailed July 21, 2010.

Applicant respectfully addresses or traverses each of the outstanding objections and rejections below. Claims 20-35 are pending. Claims 1-19 were previously cancelled. Claims 26-29 and 35 were withdrawn by the Examiner. Claims 20, 21 and 34 are amended herewith. Claim 20 is the lone independent claim.

Applicant gratefully acknowledges and wishes to thank the Examiner for providing a translation of the German Utility Model, which was mailed by the Examiner on July 27, 2010.

Regarding the objection to the drawings, Applicant submits that Replacement Sheets 1/8 through 8/8, include formal drawings of Figures 1 through 14. Applicant respectfully submits that no new matter has been added in Replacement Sheets 1/8 through 8/8.

Accordingly, for at least the foregoing reasons, Applicant respectfully requests that the objections to the drawings be withdrawn.

Regarding the objection to the Abstract, Applicant has amended the Abstract to conform with standard rules of patent practice in the United States. *See* M.P.E.P. § 608.01(b). In view of the foregoing Amendments to the Abstract, Applicant submits that the Examiner's objections thereto have been properly addressed, and respectfully requests that they be withdrawn.

Regarding the objections to claims 32 and 33, the Examiner argues that claims 32 and 33 fail to limit the subject matter recited in the claims from which they depend, and are thus of improper dependent form. Office Action, page 7. Applicant respectfully disagrees with the Examiner.

A claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. *See* 35 U.S.C. § 112, fourth paragraph. In other words, a dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim. M.P.E.P. § 608.01(n).

Claim 32 expressly recites a fluid-coolable unit for removing heat from a heat source, the unit comprising a plate heated by the heat source and a distributor according to independent claim 20 for distributing a flow of cooling fluid over a surface of the plate. Claim 33 depends from claim 32, and further recites that the unit comprises two plates, each being heated by a heat source, and wherein the distributor is adapted to distribute a flow of cooling fluid over a surface of each of the plates.

As is set forth in Section 608.01(n) of the Manual of Patent Examining Procedure, a dependent claim does not lack compliance with 35 U.S.C. § 112, fourth paragraph, simply because there is a question as to (1) the significance of the further limitation added by the dependent claim, or (2) whether the further limitation in fact changes the scope of the dependent claim from that of the claim from which it depends. M.P.E.P. § 608.01(n). The test for a proper dependent claim under the fourth paragraph of 35 U.S.C. § 112 is whether the dependent claim includes every limitation of the claim from which it depend, and is not one of whether the claims differ in scope. *Id.* Because the plate recited in claim 32 and the second plate and adaptation of a distributor recited in claim 33 constitute limitations of the subject matter recited in claim 20, Applicant submits that claims 32 and 33 are of proper dependent form.

Accordingly, Applicant submits that the objections to claims 32 and 33 are improper, and respectfully requests that they be withdrawn.

Regarding the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 112, second paragraph, as indefinite, the Examiner argues that the claims fail to particularly point out and distinctly claim the subject matter which the Applicant regards as his invention. Office Action, page 3. Applicant submits that the foregoing amendments to claims 20, 21 and 34 clearly and distinctly set forth the subject matter claimed by the Examiner, and have adequately addressed the Examiner's rejections.

Specifically, Applicant has amended claim 20 to remove the recitation "are connected in parallel between the manifolds and," and has amended claim 21 to recite "direction of flow of the fluid flowing along the at least one surface to be cooled." Additionally, Applicant has amended claim 34 to recite a method for removing heat from an electronic circuit comprising providing a unit according to claim 32, and joining the unit to the electronic circuit, wherein the electronic circuit is adjacent to the surface of a plate over which the flow of cooling fluid is distributed.

Accordingly, in view of the foregoing amendments to claims 20, 21 and 34, Applicant respectfully requests that the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Regarding the rejection of claim 34 under 35 U.S.C. § 101, the Examiner argues that claim 34 recites a use, and fails to properly recite a process. Office Action, pages 8-9. Applicant respectfully submits that the foregoing amendments to claim 34 properly recite the steps of a method, and respectfully request that the rejection of claim 34 under 35 U.S.C. § 101 be withdrawn.

Regarding the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(a) as anticipated by the German Utility Model, the Examiner argues that Figures 1-4 of the German Utility Model “are identical to the same figures in the instant application and disclose all of the recited elements,” and that claims 20-25 and 30-34 are anticipated thereby. Office Action, page 9. Applicant respectfully disagrees with the Examiner.

A claim is anticipated only if each and every element set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim, and the elements must be arranged as required by the claim.

Applicant respectfully submits that claims 20-25 and 30-34 are not anticipated by the German Utility Model, at least because the German Utility Model fails to show or disclose an inner wall structure of the housing that defines the inlet manifold, the outlet manifold, and the plurality of flow cells, as is recited in amended claim 20.

In rejecting claims 20-25 and 30-34, the Examiner noted that the embodiments of Figures 1-4 of the German Utility Model are “arranged exactly the same as the plurality of flow cells and flow channels of the instant application.” Office Action, page 9. However, Figures 1-4 of the German Utility Model, fail to show or disclose an inner wall structure of the housing that defines the inlet manifold, the outlet manifold, and the plurality of flow cells. As is shown in Figure 1 of both the German Utility Model and the subject Application, and disclosed on pages 7 and 8 of the translated version of the German Utility Model, holes 14 and 15 are formed in the bathtub-shaped “bottom part 13,” along its perimeter, and are not defined by an inner wall structure of the housing. Additionally, the elements of the German Utility Model that the Examiner has

identified as “inlet and outlet manifolds” are, holes, not manifolds. *See* German Utility Model Translation, pages 7-9.

Moreover, the Examiner has failed to identify any portion of the German Utility Model that corresponds to an “inner wall structure of the housing” that “defines the inlet manifold, the outlet manifold and the plurality of flow cells,” as is recited in amended claim 20. Therefore, because the Examiner has failed to demonstrate that each and every element recited in amended claim 20, or any claim depending therefrom, is found, either expressly or inherently described, in the German Utility Model, shown in as complete detail as is contained in the claim, and arranged as required by the claim, Applicant respectfully submits that the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(a) should be withdrawn. *See* M.P.E.P. 2131.

According to the subject Application, one embodiment of an inner wall structure that defines an inlet manifold, an outlet manifold and a plurality of fuel cells is shown in Figures 9 and 10, and described in paragraphs 0059 through 0065 of the specification. Notably, Figures 9 and 10, and paragraphs 0059 through 0065, are not included in the German Utility Model.

Accordingly, for at least the foregoing reasons, Applicant submits that the rejection of amended claim 20 under 35 U.S.C. § 102(a) are improper, and that the rejections of claims 21-25 and 30-34, which depend from amended claim 20, are also improper. Applicant respectfully requests that the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(a) be withdrawn.

Regarding the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(d), the Examiner argues that the German Utility Model was filed more than twelve months earlier than the present invention, that the German Utility Model has resulted in the granting of a foreign patent or inventor’s certificate, and that the same invention is involved. Office Action, page 10.

Applicant respectfully disagrees with the Examiner, and submits that the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(d) are improper, at least because the Examiner has failed to satisfy each of the four requirements of 35 U.S.C. § 102(d). *See* M.P.E.P. § 2135.01. Specifically, the Examiner has not demonstrated that claims 20-25 and 30-34 could have been presented in the

German Utility Model, as is required in order for a reference to qualify as prior art under 35 U.S.C. § 102(d). *Id.* As is set forth above, the figures and specification sections which disclose an inner wall structure of the housing that defines the inlet manifold, the outlet manifold, and the plurality of flow cells were not included in the German Utility Model. As such, the claims of the German Utility Model did not recite, and could not have recited, an inner wall structure of the housing that defines the inlet manifold, the outlet manifold, and the plurality of flow cells. Accordingly, amended claim 20 could not have been presented in the German Utility Model, and is thus not anticipated by the German Utility Model under 35 U.S.C. § 102(d). For at least the same reasons, claims 21-25 and 30-34, which depend from amended claim 20, are also not anticipated by the German Utility Model under 35 U.S.C. § 102(d).

Accordingly, for at least the foregoing reasons, Applicant respectfully submits that the rejections of claims 20-25 and 30-34 under 35 U.S.C. § 102(d) are improper, and respectfully requests that they be withdrawn.

Applicant respectfully submits that the foregoing amendments to claims 20, 21 and 34, the Abstract of the Disclosure and Figures 1-14 find support generally throughout the specification as filed, and that no new matter has been added.

As Applicant has addressed or traversed each and every objection and rejection raised by the Examiner in the outstanding Office Action, Applicant respectfully requests that the Examiner withdraw the present objections and rejections, and pass claims 20-25 and 30-34 to issue.

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Applicant believes that no fees are due in connection with this Amendment and Response. If any fees are deemed necessary, Attorneys for Applicant hereby authorize the Commissioner to deduct such fees from our Deposit Account 13-0235.

Respectfully submitted

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